

Amendments to the Claims

1. (Currently Amended) A semiconductor diffusion prevention structure, comprising:

a silicide layer formed on a semiconductor substrate; and

a ternary phase layer formed on said silicide layer, wherein the ternary phase layer is formed of Co, Si and a metal which is selected from a group consisting of Ti, Ta, W, V, Cr, Mn, Zr, Mo and Hf.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) ~~The semiconductor device of claim 4,~~ A semiconductor device, comprising:

a semiconductor substrate;

an insulator film formed on said substrate to define a contact hole such that said substrate is exposed;

a silicide layer formed on said substrate and bottom of said contact hole;

a ternary phase layer formed on said silicide layer, wherein said ternary phase layer is a Co-Ti-Si layer formed of Co, Si and a metal

which is selected from a group consisting of Ti, Ta, W, V, Cr, Mn, Zr, Mo and Hf;

a conductive plug on said diffusion prevention layer in said contact hole; and

a conducting layer on said conductive plug.

6. (New) The semiconductor device of claim 5, further comprising:
a first metal film formed on sidewalls of the contact hole; and
a second metal film formed on the first metal layer.

7. (New) The semiconductor device of claim 6, wherein the first metal film is a Co film.

8. (New) The semiconductor device of claim 7, wherein the second metal film is one selected from a group consisting of a Ti film, a Ta film, a W film, a V film, a Cr film, a Mn film, a Zr film, a Mo film and a Hf film.